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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,301	11/14/2003	Edwin John William Zonneveld	80141-3902 ADB	8859
23529	7590	04/26/2005	EXAMINER	
ADE & COMPANY 1700-360 MAIN STREET WINNIPEG, MB R3C3Z3 CANADA			COOLEY, CHARLES E	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 04/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/712,301	ZONNEVELD ET AL.
	Examiner	Art Unit
	Charles E. Cooley	1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 26-30 is/are allowed.
- 6) Claim(s) 1,2,8,9,12-16,18,22 and 23 is/are rejected.
- 7) Claim(s) 3-7,10,11,17,19-21,24 and 25 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 14 November 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03022004.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

NON-FINAL OFFICE ACTION

1. This application has been assigned to Technology Center 1700, Art Unit 1723 and the following will apply for this application:

Please direct all written correspondence with the correct application serial number for this application to Art Unit 1723.

Telephone inquiries regarding this application should be directed to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197 or to the Examiner at (571) 272-1139. All official facsimiles should be transmitted to (703) 872-9306.

2. As the PTO continues to move towards a fully electronic environment, the office will phase-in its E-Patent Reference program. This program: (1) provides downloading capability of the U.S. patents and U.S. patent application publications cited in Office actions via the E-Patent Reference feature of the Office's PAIR system; and (2) ceases mailing paper copies of U.S. patents and U.S. patent application publications with office actions except for citations made during the international stage of an international application under PCT.

Effective June 2004, paper copies of cited U.S. patents and U.S. patent application publications will cease to be mailed to applicants with Office actions from this Technology Center. Paper copies of foreign patents and non-patent literature will continue to be included with office actions.

The U.S. patents and patent application publications cited in office actions are available for download via the Office's PAIR system. As an alternate source, all U.S.

patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources. Inquiries about the use of the Office's PAIR system should be referred to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.

Requests to restart a period for response due to a missing U.S. patent or patent application publications will not be granted.

Priority

3. Acknowledgment is made of applicant's claim for domestic priority under 35 U.S.C. § 119(e).

Information Disclosure Statement

4. Note the attached PTO-1449 form submitted with the Information Disclosure Statement filed 2 MAR 2004.

Oath/Declaration

5. The oath or declaration is defective. A new oath or declaration in compliance with 37 C.F.R. § 1.67(a) identifying this application by its Serial Number and filing date is required. See M.P.E.P. §§ 602.01 and 602.02.

The oath or declaration is defective because:

Non-initialed and/or non-dated alterations have been made to the oath or declaration in the post office address of the fourth inventor. See 37 CFR 1.52(c).

Drawings

6. The drawings are objected to because of the following informalities:

- a. the drawings are informal and do not comply with 37 CFR 1.84.
- b. the drawings contain improper sectional views. The plane upon which a sectional view is taken should be indicated on the view from which the section is cut by a broken line. The ends of the broken line should be designated by Arabic or Roman numerals corresponding to the view number of the sectional view, and should have arrows to indicate the direction of sight (37 CFR 1.84(h)(3)). Correction is required.

For example, Figure 5 should be a sectional view taken along line 5-5 in Figure 3 (not sectional line A-A). All sectional views should be corrected in accordance with 37 CFR 1.84(h)(3).

Applicant should also ensure a proper one-to-one correspondence between the specification and drawings in accordance with MPEP 608.01(g) and 37 CFR 1.84(f). The brief description of the drawings and the descriptive portion of the specification require revision in accordance with the above drawing objections.

Correction is required.

7. Applicant should verify that (1) all reference characters in the drawings are described in the detailed description portion of the specification and (2) all reference characters mentioned in the specification are included in the appropriate drawing Figure(s) as required by 37 CFR 1.84(p)(5).

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" (37 CFR 1.121(d)) and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

Specification

8. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

9. The abstract is acceptable.
10. The title is acceptable.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. **Claims 1, 2, 8, 9, 13, 14, 15, 16, 18, 22, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by JONES (US 1,733,266).**

The patent to JONES '266 discloses a centrifuge including a rotatable bowl 11 with a mouth 41; feed duct 33; accelerator assembly 23, 24, 25 attached to the bottom of the bowl and having a top plate (above 25) having a central hole (Fig. 1) arranged to receive the materials from the bottom feed mouth of the duct 33 so that the materials pass through the central hole to a position underneath the plate; a plurality of vanes 25 underneath the top plate at angularly spaced positions around the axis of the bowl with each vane extending generally outwardly from an inner end underneath the hole to an outer end adjacent the peripheral wall (Figs. 1-2); wherein the accelerator includes a deflector plate (the screw secured plate above 28 and proximate 25 in Fig. 1) underneath top plate and generally underneath the hole lying generally in a radial plane relative to the axis of the bowl and arranged to engage the materials passing through

the hole so as to deflect the materials from an axial direction passing through the hole to a radial direction as seen in Fig. 1; wherein the vanes 25 each have an inner nose underneath the hole and extend outwardly from the nose leaving a center area underneath the hole free from the vanes 25 as seen in Figs. 1-2; wherein the vanes 25 each have a top surface connected to a bottom surface of the top plate (Fig. 1); wherein there is provided on the peripheral wall at least one annular collection recess area having a lower side wall and an upper side wall extending outwardly away from the axis to a base (the area(s) between the blades 29; a plurality of ports 15 arranged at spaced positions around the recess; the accelerator assembly 23, 24, 25 having screw fasteners 31 (and proximate 25) as seen in Fig. 1; wherein the vanes 25 each have an inner nose underneath the hole and projecting radially inwardly from an outer edge of the deflector plate with each vane extend outwardly from the nose leaving a center area of the deflector plate underneath the hole free from the vanes (Figs. 1-2).

Furthermore, the product-by-process limitation (i.e., the manner in which the accelerator is formed, i.e., by molding) does not impart patentability to the claims per MPEP 2113.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to

which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over JONES (US 1,733,266).

JONES '266 does not disclose the accelerator being formed from a plastic material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed any of the components of the centrifuge apparatus from plastic, including the accelerator, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416; *Sinclair & Carroll Co., Inc. v. Interchemical Corp.*, 65 USPQ 297 (1945).

Furthermore, in view of the fact that the use of plastic vis-à-vis any other common construction material solves no stated problem insofar as the record is concerned and the conclusion of obviousness can be made from the common

knowledge and common sense of one of ordinary skill in the art (*In re Bozek*, 416 F.2d 1385, 163 USPQ 545 (CCPA 1969)), it would have been obvious to one of ordinary skill in the art to have formed any of the components of the prior art centrifuge from a well-known construction material such as plastic. *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975).

It is observed that artisans must be presumed to know something about the art apart from what the references disclose (see *In re Jacoby*, 309 F.2d 513, 135 USPQ 317 (CCPA 1962)). Moreover, skill is presumed on the part of those practicing in the art. See *In re Sovish*, 769 F.2d 738, 226 USPQ 771 (Fed. Cir. 1985). Therefore, it is concluded that the selection of a well-known material in the art such as plastic would have been obvious to one of ordinary skill in this art, if for no other reason than to achieve the advantage of using a more modern material or a lower cost or more easily fabricated material.

Again, the product-by-process limitation of claim 12 (i.e., the manner in which the accelerator is formed, i.e., by molding) does not impart patentability to the claims per MPEP 2113.

Allowable Subject Matter

16. Claims 3-7, 10-11, 17, 19-21, and 24-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
17. Claims 26-30 are allowable over the prior art of record.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited prior art discloses state of the art centrifugal concentrators, some with fed accelerators therein.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Charles E. Cooley
Primary Examiner
Art Unit 1723

21 April 2005